

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of 2

Complete if Known

Application Number	10/730,194
Filing Date	4 December 2003
First Named Inventor	Andrew J. Hull
Art Unit	
Examiner Name	
Attorney Docket Number	84280

U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code ² (if known)		
XS		US- 4,061,017	12-06-1977	Sloane et al
		US- 4,352,292	10-05-1982	Madigosky et al
		US- 4,418,573	12-06-1983	Madigosky et al
		US- 4,633,449	12-30-1986	Ingram
		US- 4,674,334	06-23-1987	Chimenti et al
		US- 5,143,072	09-01-1992	Kantorovich et al
		US- 5,363,701	11-15-1994	Lee et al
		US- 5,365,457	11-15-1994	Madigosky
		US- 5,495,763	03-05-1996	Rhodes et al
		US- 5,533,399	07-09-1996	Gibson et al
		US- 5,621,172	04-15-1997	Wilson et al
		US- 6,139,496	10-31-2000	Chen et al
		US- 6,155,116	12-05-2000	John D. Muench et al
XS		US- 6,609,428 B2	08-26-2003	Hull
	US-			

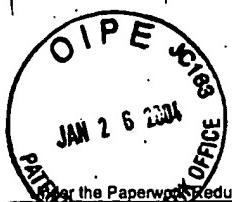
FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)		

Examiner Signature	<i>Ding J. S.</i>	Date Considered	11/04/04
--------------------	-------------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1649/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

2

of

2

Complete if Known

Application Number	10/730,194
Filing Date	4 December 2003
First Named Inventor	Andrew J. Hull
Art Unit	
Examiner Name	

Attorney Docket Number

84280

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate); title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
XS		D.M.NORRIS, JR. & WUN-CHUNG YOUNG, Complex-Modulus Measurement by Longitudinal Vibration Testing, Journal; February 1970, pp. 93-96, volume 10, Experimental Mechanics, USA	
XS		W.M. MADIGOSKY & G.F. LEE, Improved Resonance Technique for Materials Characterization, Journal, April 1983, pp. 1374-1377, Volume 73, Number 4,	
		Journal of the Acoustical Society of America, USA	
XS		S.L. GARRETT, Resonant Acoustic Determination of Elastic Moduli, Journal, July 1990, pp.21-220, Volume 88, Number 1, Journal of the Acoustical Society of America, USA	
XS		B.J. DOBSON, A Straight Time Technique for Extracting Modal Properties from Frequency Response Data, Journal, 1987, pp. 29-40, Volume 1,	
		Mechanical Systems and Signal Processing, USA	
XS		T. PRITZ, Transfer Function Method for Investigating the Complex Modulus of Acoustic Materials: Rod-Like Specimen, Journal, 1982, pp.359-376, Volume 81,	
		Journal of Sound and Vibration, USA	
XS		T. PRITZ, Frequency Dependencies of Complex Moduli and Complex Poisson's Ratio of Real Solid Materials, Journal, 1998, pp.83-104, Volume 214,	
		Journal of Sound and Vibration, USA	

Examiner Signature	Date Considered
	11/04/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1. Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
 Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.